

Serial No. 09/741,846

- 2 -

Art Unit: 2181

In the Claims:

Please amend the below claims as indicated.

*Sub*  
*C*

(Currently Amended) A method for transferring data comprising:  
providing a master request bus;  
providing a slave request bus;  
initiating an operation utilizing a protocol when a master request and an arbiter grant is received from the master request bus;  
wherein the protocol enables transfer of data between computer hardware operating according to different protocols;  
dispatching packet data to an analysis machine; and  
classifying the packet data in the analysis machine.

2. (Previously Amended) A method for transferring data, comprising:  
providing a master request bus;  
providing a slave request bus;  
initiating an operation utilizing a protocol when a master request and an arbiter grant is received from the master request bus;  
wherein the protocol enables transfer of data between computer hardware operating according to different protocols;  
transferring data from an input buffer to a packet task manager;  
dispatching the data from the packet task manager to an analysis machine;  
classifying the data in the analysis machine; and  
modifying and forwarding the data in a packet manipulator.

3. (Previously Amended) The method for transferring data according to claim 2, further comprising transferring the data after modifying and forwarding to an output buffer.

Serial No. 09/741,846

- 3 -

Art Unit: 2181

4. (Previously Amended) The method for transferring data according to claim 2, further comprising processing data packets at a rate of at least 10 Gbs.
5. (Currently Amended) Apparatus A global access bus for transferring data, said global access bus comprising:  
a master request bus in a global access bus; and  
a slave request bus in said global access bus, said slave request bus operationally connected to said master request bus;  
wherein said master request bus and said slave request bus utilize a protocol enabling transfer of data between computer hardware operating according to different protocols; and  
an analysis machine for classifying packet data.
6. (Previously Amended) A global access bus for transferring data, and associated apparatus, comprising:  
a master request bus;  
a slave request bus operationally connected to said master request bus;  
wherein said master request bus and said slave request bus utilize a protocol enabling transfer of data between computer hardware operating according to different protocols;  
an analysis machine having multiple pipelines, wherein one pipeline is dedicated to directly manipulating individual data bits of a bit field;  
a packet task manager operationally connected to said analysis machine; and,  
a packet manipulator operationally connected to said analysis machine.
7. (Original) The apparatus according to claim 6, wherein said analysis machine is multi-threaded.
8. (Original) The apparatus according to claim 6, wherein said analysis machine has 32 threads.
9. (Previously Amended) The apparatus according to claim 6, further comprising:

Serial No. 09/741,846

- 4 -

Art Unit: 2181

a packet task manager operationally connected to said analysis machine; and  
a packet manipulator operationally connected to said analysis machine.

10. (Previously Amended) The apparatus according to claim 6 , further comprising:  
an external memory engine operationally connected to said analysis machine; and  
a hash engine operationally connected to said analysis machine.
11. (Previously Amended) The apparatus according to claim 6 , further comprising:  
packet input global access bus software code used for flow of data packet information  
from a flexible input data buffer to an analysis machine.
12. (Previously Amended) The apparatus according to claim 6 , further comprising:  
packet data global access bus software code used for flow of packet data between a  
flexible data input bus and a packet manipulator.
13. (Previously Amended) The apparatus according to claim 6 , further comprising:  
statistics data global access bus software code used for connection of an analysis machine  
to a packet manipulator.
14. (Previously Amended) The apparatus according to claim 6 , further comprising:  
private data global access bus software code used for connection of an analysis machine  
to an internal memory engine submodule.
15. (Previously Amended) The apparatus according to claim 6 , further comprising:  
lookup global access bus software code used for connection of an analysis machine to an  
internal memory engine submodule.
16. (Previously Amended) The apparatus according to claim 6 , further comprising:  
results global access bus software code used for providing flexible access to an external  
memory.

Serial No. 09/741,846

- 5 -

Art Unit: 2181

17. (Cancelled)

18. (Previously Amended) The apparatus according to claim 6 , further comprising:  
a bi-directional access port operationally connected to said analysis machine;  
a flexible data input buffer operationally connected to said analysis machine; and  
a flexible data output buffer operationally connected to said analysis machine.